

39780-1216R1C1D6 SAVED NOVEMBER 27, 2006.txt
Sequence Listing



<110> Genentech Inc.
Ashkenazi, Avi
Fong, Sherman
Goddard, Audrey
Gurney, Austin L.
Napier, Mary A.
Tumas, Daniel
Wood, William I.

<120> COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT OF DISEASES CHARACTERIZED BY A-33 RELATED ANTIGENS

<130> P1216R1

<140> PCT/US98/24855
<141> 1998-11-20

<150> US 60/066,364
<151> 1997-11-21

<150> US 60/078,936
<151> 1998-03-20

<150> PCT/US98/19437
<151> 1998-09-17

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35 40 45

Val Lys Leu Ser Cys Ala Tyr Ser Gly Phe Ser Ser Pro Arg Val
50 55 60

Glu Trp Lys Phe Asp Gln Gly Asp Thr Thr Arg Leu Val Cys Tyr
65 70 75

Asn Asn Lys Ile Thr Ala Ser Tyr Glu Asp Arg Val Thr Phe Leu
80 85 90

Pro Thr Gly Ile Thr Phe Lys Ser Val Thr Arg Glu Asp Thr Gly
95 100 105

Thr Tyr Thr Cys Met Val Ser Glu Glu Gly Gly Asn Ser Tyr Gly
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Glu Val Lys Val Lys Leu Ile Val Leu Val Pro Pro Ser Lys Pro
125 130 135

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Thr Val Asn Ile Pro Ser Ser Ala Thr Ile Gly Asn Arg Ala Val
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Leu Thr Cys Ser Glu Gln Asp Gly Ser Pro Pro Ser Glu Tyr Thr
155 160 165
Trp Phe Lys Asp Gly Ile Val Met Pro Thr Asn Pro Lys Ser Thr
170 175 180
Arg Ala Phe Ser Asn Ser Ser Tyr Val Leu Asn Pro Thr Thr Gly
185 190 195
Glu Leu Val Phe Asp Pro Leu Ser Ala Ser Asp Thr Gly Glu Tyr
200 205 210
Ser Cys Glu Ala Arg Asn Gly Tyr Gly Thr Pro Met Thr Ser Asn
215 220 225
Ala Val Arg Met Glu Ala Val Glu Arg Asn Val Gly Val Ile Val
230 235 240
Ala Ala Val Leu Val Thr Leu Ile Leu Leu Gly Ile Leu Val Phe
245 250 255
Gly Ile Trp Phe Ala Tyr Ser Arg Gly His Phe Asp Arg Thr Lys
260 265 270
Lys Gly Thr Ser Ser Lys Lys Val Ile Tyr Ser Gln Pro Ser Ala
275 280 285
Arg Ser Glu Gly Glu Phe Lys Gln Thr Ser Ser Phe Leu Val
290 295

<210> 2
<211> 321
<212> PRT
<213> Homo sapiens

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20 25 30
Gly Pro Trp Lys Gly Asp Val Asn Leu Pro Cys Thr Tyr Asp Pro
35 40 45
Leu Gln Gly Tyr Thr Gln Val Leu Val Lys Trp Leu Val Gln Arg
50 55 60
Gly Ser Asp Pro Val Thr Ile Phe Leu Arg Asp Ser Ser Gly Asp
65 70 75
His Ile Gln Gln Ala Lys Tyr Gln Gly Arg Leu His Val Ser His
80 85 90
Lys Val Pro Gly Asp Val Ser Leu Gln Leu Ser Thr Leu Glu Met
95 100 105
Asp Asp Arg Ser His Tyr Thr Cys Glu Val Thr Trp Gln Thr Pro
110 115 120

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Asp Gly Asn Gln Val Val Arg Asp Lys Ile Thr Glu Leu Arg Val
125 130 135
Gln Lys Leu Ser Val Ser Lys Pro Thr Val Thr Thr Gly Ser Gly
140 145 150
Tyr Gly Phe Thr Val Pro Gln Gly Met Arg Ile Ser Leu Gln Cys
155 160 165
Gln Ala Arg Gly Ser Pro Pro Ile Ser Tyr Ile Trp Tyr Lys Gln
170 175 180
Gln Thr Asn Asn Gln Glu Pro Ile Lys Val Ala Thr Leu Ser Thr
185 190 195
Leu Leu Phe Lys Pro Ala Val Ile Ala Asp Ser Gly Ser Tyr Phe
200 205 210
Cys Thr Ala Lys Gly Gln Val Gly Ser Glu Gln His Ser Asp Ile
215 220 225
Val Lys Phe Val Val Lys Asp Ser Ser Lys Leu Leu Lys Thr Lys
230 235 240
Thr Glu Ala Pro Thr Thr Met Thr Tyr Pro Leu Lys Ala Thr Ser
245 250 255
Thr Val Lys Gln Ser Trp Asp Trp Thr Thr Asp Met Asp Gly Tyr
260 265 270
Leu Gly Glu Thr Ser Ala Gly Pro Gly Lys Ser Leu Pro Val Phe
275 280 285
Ala Ile Ile Leu Ile Ile Ser Leu Cys Cys Met Val Val Phe Thr
290 295 300
Met Ala Tyr Ile Met Leu Cys Arg Lys Thr Ser Gln Gln Glu His
305 310 315
Val Tyr Glu Ala Ala Arg
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<212> DNA
<213> Artificial Sequence

<220>
<223> sequence is synthesized

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catccccctcc tctgccacca ttggaaaccg ggcagtgctg acatgcttag 200
aacaagatgg ttccccaccc tctgaataca cctggttcaa agatggata 250
gtgatgccta cgaatcccaa aagcaccgt gccttcagca actcttccta 300

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ctgatactgg agaatacagc tgtgaggcac ggaatggta 390

<210> 4

<211> 726

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gcgcaagctc gagagggaaac tgggtgcct cttcatattg gcgatcctgt 150

tgtgctccct ggcattgggc agtgttacag ttgcactctt ctgaacctga 200

agtcagaatt cctgagaata atcctgtgaa gttgtcctgt gcctactcg 250

gcttttcttc tccccgtgtg gagtggaaat ttgaccaagg agacaccacc 300

agactcgaaa gctataataa caagatcaca gcttcctatg aggacccgg 350

gacccctttt ccaactggta tcaccccaa gtccgtgaca cggaaagaca 400

ctggacata cacttgtatg gtctctgagg aaggccgaa cagctatggg 450

gaggtcaagg tcaagctcat cgtgctgtg cctccatcca agcctacagt 500

taacatcccc tcctctgcca ccattggaa ccgggcagtg ctgacatgct 550

cagaacaaga tggttccca cttctgaat acacctggtt caaagatggg 600

atagtatgc ctacgaatcc caaaagcacc cgtgccttca gcaactcttc 650

ctatgtcctg aatcccacaa caggagagct ggttttgat cccctgtcag 700

cctctgatac tggagaatac agctgt 726

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<212> DNA

<213> Artificial Sequence

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acgtgtgaag tcacctggca gactcctgat ggcaaccaag tcgtgagaga 150

taagattact gagctccgtg tccagaaact ctctgtctcc aagcccacag 200

tgacaactgg cagcggttat ggcttcacgg tgccccaggg aatgaggatt 250

agccttcaat gccagggttc ggggttctcc tcccatcagt tatatttgg 300

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taccttactc ttcaaggCTG cggtgatAGC cgactcaggc tcctatttct 400
gcactGCCaa gggccAGGTT ggctctgAGC agcacAGCga cattgtGAAG 450
tttggtca aagactCCtC aaagctactc aagaccaaga ctgaggcacc 500
tacaaccatg acatacccct tgaaAGCAAC atctacAGT aagcagtCCT 550
gggactggac cactgacatg gatggctacc ttggagAGAC cagtGCTGGG 600
ccaggAAAGA gcctgcctgt ctTGCCATC atcCTCATCA tctcCTTGTG 650
ctgtatggtg gttttacca tggcCTATAT catgctCTGT cggaAGACAT 700
ccccacaAGA gcatgtCTAC gaAGCAGCCA gggcacATGC cAGAGAGGCC 750
aacgactCTG gagAAACCAt gagggTGGCC atTTCGCAA gtggCTGCTC 800
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cgccccCTG ctggacacAG ttccTCTGGA ttatGAGTTT ctggCCACTG 950
agggcaAAAG tgtctgttaa aaatGCCCA ttAGGCCAGG atctGCTGAC 1000
ataattGCTCt agtcaGTCCT tgcCTTCTGC atggCCTTCT tccCTGCTAC 1050
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gggagtcaCT ggCTTGGCC tggAAATTGc cAGATGATC TCAAGTAAGC 1150
cagctGCTGG atttggCTCT gggCCCTTCT agtatCTCTG ccggggGCTT 1200
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tatttcacAG gCcaggGTTc agttCTGCTC CTCCACTATA agtctaATGT 1450
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<212> PRT
<213> Homo sapiens

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Leu Arg Ala Ser Gln Gly Lys Ser Val Thr Leu Pro Cys Thr Tyr
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His Thr Ser Thr Ser Ser Arg Glu Gly Leu Ile Gln Trp Asp Lys
50 55 60
Leu Leu Leu Thr His Thr Glu Arg Val Val Ile Trp Pro Phe Ser
65 70 75
Asn Lys Asn Tyr Ile His Gly Glu Leu Tyr Lys Asn Arg Val Ser
80 85 90
Ile Ser Asn Asn Ala Glu Gln Ser Asp Ala Ser Ile Thr Ile Asp
95 100 105
Gln Leu Thr Met Ala Asp Asn Gly Thr Tyr Glu Cys Ser Val Ser
110 115 120
Leu Met Ser Asp Leu Glu Gly Asn Thr Lys Ser Arg Val Arg Leu
125 130 135
Leu Val Leu Val Pro Pro Ser Lys Pro Glu Cys Gly Ile Glu Gly
140 145 150
Glu Thr Ile Ile Gly Asn Asn Ile Gln Leu Thr Cys Gln Ser Lys
155 160 165
Glu Gly Ser Pro Thr Pro Gln Tyr Ser Trp Lys Arg Tyr Asn Ile
170 175 180
Leu Asn Gln Glu Gln Pro Leu Ala Gln Pro Ala Ser Gly Gln Pro
185 190 195
Val Ser Leu Lys Asn Ile Ser Thr Asp Thr Ser Gly Tyr Tyr Ile
200 205 210
Cys Thr Ser Ser Asn Glu Glu Gly Thr Gln Phe Cys Asn Ile Thr
215 220 225
Val Ala Val Arg Ser Pro Ser Met Asn Val Ala Leu Tyr Val Gly
230 235 240
Ile Ala Val Gly Val Val Ala Ala Leu Ile Ile Ile Gly Ile Ile
245 250 255
Ile Tyr Cys Cys Cys Cys Arg Gly Lys Asp Asp Asn Thr Glu Asp
260 265 270
Lys Glu Asp Ala Arg Pro Asn Arg Glu Ala Tyr Glu Glu Pro Pro
275 280 285
Glu Gln Leu Arg Glu Leu Ser Arg Glu Arg Glu Glu Glu Asp Asp
290 295 300
Tyr Arg Gln Glu Glu Gln Arg Ser Thr Gly Arg Glu Ser Pro Asp
305 310 315
His Leu Asp Gln

<210> 7
<211> 2181
<212> DNA

<213> Homo sapiens

<400> 7

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tggtgctcaa taaatatcta atcataacag c 2181

<210> 8

<211> 1295

<212> DNA

<213> Homo sapiens

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<210> 9

<211> 312

<212> PRT

<213> Homo sapiens

<400> 9

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20 25 30

Ala Pro Lys Asp Gln Gln Val Val Thr Ala Val Glu Tyr Gln Glu
35 40 45

Ala Ile Leu Ala Cys Lys Thr Pro Lys Lys Thr Val Ser Ser Arg
50 55 60

Leu Glu Trp Lys Lys Leu Gly Arg Ser Val Ser Phe Val Tyr Tyr
65 70 75

Gln Gln Thr Leu Gln Gly Asp Phe Lys Asn Arg Ala Glu Met Ile
80 85 90

Asp Phe Asn Ile Arg Ile Lys Asn Val Thr Arg Ser Asp Ala Gly
95 100 105

Lys Tyr Arg Cys Glu Val Ser Ala Pro Ser Glu Gln Gly Gln Asn
110 115 120

Leu Glu Glu Asp Thr Val Thr Leu Glu Val Leu Val Ala Pro Ala
125 130 135

Val Pro Ser Cys Glu Val Pro Ser Ser Ala Leu Ser Gly Thr Val
140 145 150

Val Glu Leu Arg Cys Gln Asp Lys Glu Gly Asn Pro Ala Pro Glu
155 160 165

Tyr Thr Trp Phe Lys Asp Gly Ile Arg Leu Leu Glu Asn Pro Arg

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170 175 180

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185 190 195
Thr Gly Thr Leu Gln Phe Asn Thr Val Ser Lys Leu Asp Thr Gly
200 205 210
Glu Tyr Ser Cys Glu Ala Arg Asn Ser Val Gly Tyr Arg Arg Cys
215 220 225
Pro Gly Lys Arg Met Gln Val Asp Asp Leu Asn Ile Ser Gly Ile
230 235 240
Ile Ala Ala Val Val Val Val Ala Leu Val Ile Ser Val Cys Gly
245 250 255
Leu Gly Val Cys Tyr Ala Gln Arg Lys Gly Tyr Phe Ser Lys Glu
260 265 270
Thr Ser Phe Gln Lys Ser Asn Ser Ser Ser Lys Ala Thr Thr Met
275 280 285
Ser Glu Asn Val Gln Trp Leu Thr Pro Val Ile Pro Ala Leu Trp
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Lys Ala Ala Ala Gly Gly Ser Arg Gly Gln Glu Phe
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<210> 10
<211> 300
<212> PRT
<213> Mus musculus

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35 40 45
Lys Leu Thr Cys Thr Tyr Ser Gly Phe Ser Ser Pro Arg Val Glu
50 55 60
Trp Lys Phe Val Gln Gly Ser Thr Thr Ala Leu Val Cys Tyr Asn
65 70 75
Ser Gln Ile Thr Ala Pro Tyr Ala Asp Arg Val Thr Phe Ser Ser
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Ser Gly Ile Thr Phe Ser Ser Val Thr Arg Lys Asp Asn Gly Glu
95 100 105
Tyr Thr Cys Met Val Ser Glu Glu Gly Gly Gln Asn Tyr Gly Glu
110 115 120
Val Ser Ile His Leu Thr Val Leu Val Pro Pro Ser Lys Pro Thr
125 130 135
Ile Ser Val Pro Ser Ser Val Thr Ile Gly Asn Arg Ala Val Leu

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140 145 150

Thr Cys Ser Glu His Asp Gly Ser Pro Pro Ser Glu Tyr Ser Trp
155 160 165
Phe Lys Asp Gly Ile Ser Met Leu Thr Ala Asp Ala Lys Lys Thr
170 175 180
Arg Ala Phe Met Asn Ser Ser Phe Thr Ile Asp Pro Lys Ser Gly
185 190 195
Asp Leu Ile Phe Asp Pro Val Thr Ala Phe Asp Ser Gly Glu Tyr
200 205 210
Tyr Cys Gln Ala Gln Asn Gly Tyr Gly Thr Ala Met Arg Ser Glu
215 220 225
Ala Ala His Met Asp Ala Val Glu Leu Asn Val Gly Gly Ile Val
230 235 240
Ala Ala Val Leu Val Thr Leu Ile Leu Leu Gly Leu Leu Ile Phe
245 250 255
Gly Val Trp Phe Ala Tyr Ser Arg Gly Tyr Phe Glu Thr Thr Lys
260 265 270
Lys Gly Thr Ala Pro Gly Lys Lys Val Ile Tyr Ser Gln Pro Ser
275 280 285
Thr Arg Ser Glu Gly Glu Phe Lys Gln Thr Ser Ser Phe Leu Val
290 295 300

<210> 11
<211> 1842
<212> DNA
<213> Homo sapiens

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agctttgtt gtggagagca tagtaaattt tcagagaact tgaagccaaa aggatttaaa 1620
accgcgtc taaagaaaaag aaaactggag gctgggcgca gtggctcacg cctgtaatcc 1680
cagaggtcgta ggcaggcgga tcacctgagg tcgggagttc gggatcagcc tgaccaacat 1740
ggagaaaccc tactggaaat acaaagttag ccagggatgg tggtgcatgc ctgtagtc 1800
agctgctcgagc ggcctggca acaagagcaa aactccagct ca 1842

<210> 12
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<400> 12
tcgcggagct gtgttctgtt tccc 24

<210> 13
<211> 50
<212> DNA
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<220>
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<400> 13
tgatcgcat ggggacaaag gcgaagctc gagagggaaac tgggtgcct 50

<210> 14
<211> 20
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<220>
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<400> 14
acacctggtt caaagatggg 20

<210> 15
<211> 24
<212> DNA
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<220>
<223> sequence is synthesized

<400> 15
taggaagagt tgctgaaggc acgg 24

<210> 16
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<220>
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<400> 16
ttgccttact caggtgctac 20

<210> 17

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<211> 20
<212> DNA
<213> artificial sequence

<220>
<223> sequence is synthesized

<400> 17
actcagcagt ggttaggaaag 20

<210> 18
<211> 24
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<220>
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<400> 18
tatccctcca attgaggcacc ctgg 24

<210> 19
<211> 21
<212> DNA
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<220>
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<400> 19
gtcggaaagac atcccaacaa g 21

<210> 20
<211> 24
<212> DNA
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<400> 20
tttcacaatg tcgctgtgct gctc 24

<210> 21
<211> 24
<212> DNA
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<220>
<223> sequence is synthesized

<400> 21
agccaaatcc agcagctggc ttac 24

<210> 22
<211> 50
<212> DNA
<213> artificial sequence

<220>
<223> sequence is synthesized

<400> 22

39780-1216R1C1D6 SAVED NOVEMBER 27, 2006.txt
tggatgaccg gagccactac acgtgtaaag tcacctggca gactcctgat 50

<210> 23
<211> 260
<212> PRT
<213> Homo sapiens

<400> 23
Leu Ala Leu Gly Ser Val Thr Val His Ser Ser Glu Pro Glu Val
1 5 10 15
Arg Ile Pro Glu Asn Asn Pro Val Lys Leu Ser Cys Ala Tyr Ser
20 25 30
Gly Phe Ser Ser Pro Arg Val Glu Trp Lys Phe Asp Gln Gly Asp
35 40 45
Thr Thr Arg Leu Val Cys Tyr Asn Asn Lys Ile Thr Ala Ser Tyr
50 55 60
Glu Asp Arg Val Thr Phe Leu Pro Thr Gly Ile Thr Phe Lys Ser
65 70 75
Val Thr Arg Glu Asp Thr Gly Thr Tyr Thr Cys Met Val Ser Glu
80 85 90
Glu Gly Gly Asn Ser Tyr Gly Glu Val Lys Val Lys Leu Ile Val
95 100 105
Leu Val Pro Pro Ser Lys Pro Thr Val Asn Ile Pro Ser Ser Ala
110 115 120
Thr Ile Gly Asn Arg Ala Val Leu Thr Cys Ser Glu Gln Asp Gly
125 130 135
Ser Pro Pro Ser Glu Tyr Thr Trp Phe Lys Asp Gly Ile Val Met
140 145 150
Pro Thr Asn Pro Lys Ser Thr Arg Ala Phe Ser Asn Ser Ser Tyr
155 160 165
Val Leu Asn Pro Thr Thr Gly Glu Leu Val Phe Asp Pro Leu Ser
170 175 180
Ala Ser Asp Thr Gly Glu Tyr Ser Cys Glu Ala Arg Asn Gly Tyr
185 190 195
Gly Thr Pro Met Thr Ser Asn Ala Val Arg Met Glu Ala Val Glu
200 205 210
Arg Asn Val Gly Val Ile Val Ala Ala Val Leu Val Thr Leu Ile
215 220 225
Leu Leu Gly Ile Leu Val Phe Gly Ile Trp Phe Ala Tyr Ser Arg
230 235 240
Gly His Phe Asp Arg Thr Lys Lys Gly Thr Ser Ser Lys Lys Val
245 250 255
Ile Tyr Ser Gln Pro
260

<210> 24

39780-1216R1C1D6 SAVED NOVEMBER 27, 2006.txt

<211> 270
<212> PRT
<213> Homo sapiens

<400> 24
Val Arg Val Thr Val Asp Ala Ile Ser Val Glu Thr Pro Gln Asp
1 5 10 15
Val Leu Arg Ala Ser Gln Gly Lys Ser Val Thr Leu Pro Cys Thr
20 25 30
Tyr His Thr Ser Thr Ser Ser Arg Glu Gly Leu Ile Gln Trp Asp
35 40 45
Lys Leu Leu Leu Thr His Thr Glu Arg Val Val Ile Trp Pro Phe
50 55 60
Ser Asn Lys Asn Tyr Ile His Gly Glu Leu Tyr Lys Asn Arg Val
65 70 75
Ser Ile Ser Asn Asn Ala Glu Gln Ser Asp Ala Ser Ile Thr Ile
80 85 90
Asp Gln Leu Thr Met Ala Asp Asn Gly Thr Tyr Glu Cys Ser Val
95 100 105
Ser Leu Met Ser Asp Leu Glu Gly Asn Thr Lys Ser Arg Val Arg
110 115 120
Leu Leu Val Leu Val Pro Pro Ser Lys Pro Glu Cys Gly Ile Glu
125 130 135
Gly Glu Thr Ile Ile Gly Asn Asn Ile Gln Leu Thr Cys Gln Ser
140 145 150
Lys Glu Gly Ser Pro Thr Pro Gln Tyr Ser Trp Lys Arg Tyr Asn
155 160 165
Ile Leu Asn Gln Glu Gln Pro Leu Ala Gln Pro Ala Ser Gly Gln
170 175 180
Pro Val Ser Leu Lys Asn Ile Ser Thr Asp Thr Ser Gly Tyr Tyr
185 190 195
Ile Cys Thr Ser Ser Asn Glu Glu Gly Thr Gln Phe Cys Asn Ile
200 205 210
Thr Val Ala Val Arg Ser Pro Ser Met Asn Val Ala Leu Tyr Val
215 220 225
Gly Ile Ala Val Gly Val Val Ala Ala Leu Ile Ile Gly Ile
230 235 240
Ile Ile Tyr Cys Cys Cys Cys Arg Gly Lys Asp Asp Asn Thr Glu
245 250 255
Asp Lys Glu Asp Ala Arg Pro Asn Arg Glu Ala Tyr Glu Glu Pro
260 265 270

<210> 25
<211> 263
<212> PRT
<213> Homo sapiens

39780-1216R1C1D6 SAVED NOVEMBER 27, 2006.txt

<400> 25
Leu Cys Ser Leu Ala Leu Gly Ser Val Thr Val His Ser Ser Glu
1 5 10 15
Pro Glu Val Arg Ile Pro Glu Asn Asn Pro Val Lys Leu Ser Cys
20 25 30
Ala Tyr Ser Gly Phe Ser Ser Pro Arg Val Glu Trp Lys Phe Asp
35 40 45
Gln Gly Asp Thr Thr Arg Leu Val Cys Tyr Asn Asn Lys Ile Thr
50 55 60
Ala Ser Tyr Glu Asp Arg Val Thr Phe Leu Pro Thr Gly Ile Thr
65 70 75
Phe Lys Ser Val Thr Arg Glu Asp Thr Gly Thr Tyr Thr Cys Met
80 85 90
Val Ser Glu Glu Gly Gly Asn Ser Tyr Gly Glu Val Lys Val Lys
95 100 105
Leu Ile Val Leu Val Pro Pro Ser Lys Pro Thr Val Asn Ile Pro
110 115 120
Ser Ser Ala Thr Ile Gly Asn Arg Ala Val Leu Thr Cys Ser Glu
125 130 135
Gln Asp Gly Ser Pro Pro Ser Glu Tyr Thr Trp Phe Lys Asp Gly
140 145 150
Ile Val Met Pro Thr Asn Pro Lys Ser Thr Arg Ala Phe Ser Asn
155 160 165
Ser Ser Tyr Val Leu Asn Pro Thr Thr Gly Glu Leu Val Phe Asp
170 175 180
Pro Leu Ser Ala Ser Asp Thr Gly Glu Tyr Ser Cys Glu Ala Arg
185 190 195
Asn Gly Tyr Gly Thr Pro Met Thr Ser Asn Ala Val Arg Met Glu
200 205 210
Ala Val Glu Arg Asn Val Gly Val Ile Val Ala Ala Val Leu Val
215 220 225
Thr Leu Ile Leu Leu Gly Ile Leu Val Phe Gly Ile Trp Phe Ala
230 235 240
Tyr Ser Arg Gly His Phe Asp Arg Thr Lys Lys Gly Thr Ser Ser
245 250 255
Lys Lys Val Ile Tyr Ser Gln Pro
260

<210> 26

<211> 273

<212> PRT

<213> Homo sapiens

<400> 26

Leu Cys Ala Val Arg Val Thr Val Asp Ala Ile Ser Val Glu Thr
Page 16

1

5

10

15

Pro Gln Asp Val Leu Arg Ala Ser Gln Gly Lys Ser Val Thr Leu
 20 25 30

Pro Cys Thr Tyr His Thr Ser Thr Ser Ser Arg Glu Gly Leu Ile
 35 40 45

Gln Trp Asp Lys Leu Leu Leu Thr His Thr Glu Arg Val Val Ile
 50 55 60

Trp Pro Phe Ser Asn Lys Asn Tyr Ile His Gly Glu Leu Tyr Lys
 65 70 75

Asn Arg Val Ser Ile Ser Asn Asn Ala Glu Gln Ser Asp Ala Ser
 80 85 90

Ile Thr Ile Asp Gln Leu Thr Met Ala Asp Asn Gly Thr Tyr Glu
 95 100 105

Cys Ser Val Ser Leu Met Ser Asp Leu Glu Gly Asn Thr Lys Ser
 110 115 120

Arg Val Arg Leu Leu Val Leu Val Pro Pro Ser Lys Pro Glu Cys
 125 130 135

Gly Ile Glu Gly Glu Thr Ile Ile Gly Asn Asn Ile Gln Leu Thr
 140 145 150

Cys Gln Ser Lys Glu Gly Ser Pro Thr Pro Gln Tyr Ser Trp Lys
 155 160 165

Arg Tyr Asn Ile Leu Asn Gln Glu Gln Pro Leu Ala Gln Pro Ala
 170 175 180

Ser Gly Gln Pro Val Ser Leu Lys Asn Ile Ser Thr Asp Thr Ser
 185 190 195

Gly Tyr Tyr Ile Cys Thr Ser Ser Asn Glu Glu Gly Thr Gln Phe
 200 205 210

Cys Asn Ile Thr Val Ala Val Arg Ser Pro Ser Met Asn Val Ala
 215 220 225

Leu Tyr Val Gly Ile Ala Val Gly Val Val Ala Ala Leu Ile Ile
 230 235 240

Ile Gly Ile Ile Ile Tyr Cys Cys Cys Cys Arg Gly Lys Asp Asp
 245 250 255

Asn Thr Glu Asp Lys Glu Asp Ala Arg Pro Asn Arg Glu Ala Tyr
 260 265 270

Glu Glu Pro

<210> 27

<211> 413

<212> DNA

<213> artificial sequence

<220>

<223> sequence is synthesized

39780-1216R1C1D6 SAVED NOVEMBER 27, 2006.txt

<400> 27
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catctgagca aggccaaaac ctggaagagg atacagtcac tctggaagta 100
ttagtggctc cagcagttcc atcatgtgaa gtaccctctt ctgctctgag 150
tggaaactgtg gtagagctac gatgtcaaga caaagaaggg aatccagctc 200
ctgaatacac atggtttaag gatggcatcc gtttgctaga aaatcccaga 250
cttggctccc aaagcaccaa cagctcatac acaatgaata caaaaactgg 300
aactctgcaa tttaatactg tttccaaact ggacactgga gaatattcct 350
gtgaagcccg caattctgtt ggatatcgca ggtgtcctgg ggaaacgaat 400
gcaagtagat gat 413

<210> 28
<211> 22
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<213> artificial sequence

<220>
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<400> 28
atcggtgtga agttagtgcc cc 22

<210> 29
<211> 23
<212> DNA
<213> artificial sequence

<220>
<223> sequence is synthesized

<400> 29
acctgcgata tccaacagaa ttg 23

<210> 30
<211> 48
<212> DNA
<213> artificial sequence

<220>
<223> sequence is synthesized

<400> 30
ggaagaggat acagtcactc tggaagtatt agtggctcca gcagttcc 48